PTO-1390 (Rev. 10-2004)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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TRANSMITTAL LETTER TO THE UNITED STATES	ATTTORNEY'S DOCKET NUMBER 56029-51044						
DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371	U.S. APPLICATION NO (IF known, see 3 CFR 1.5)						
INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/US03/11802 15 April 2003	PRIORITY DATE CLAIMED 15 April 2002						
TITLE OF INVENTION Regulated Attenuation of Live Vaccing Protective Immunogenicity	FINVENTION Regulated Attenuation of Live Vaccines to Enhance Cross-						
APPLICANT(S) FOR DO/EO/US CURTISS, III, Roy							
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:							
1. X This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.							
2. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.							
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.							
4. X The US has been elected (Article 31).							
5. X A copy of the International Application as filed (35 U.S.C. 371(c)(2))							
a. is attached hereto (required only if not communicated by the International Bureau).							
to b. X has been communicated by the International Bureau.							
c. is not required, as the application was filed in the United States Receiving Office (RO/US).							
6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).							
a. is attached hereto.							
b. has been previously submitted under 35 U.S.C. 154(d)(4).	b. has been previously submitted under 35 U.S.C. 154(d)(4).						
	7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))						
a. x are attached hereto (required only if not communicated by the International Bureau).							
b. have been communicated by the International Bureau.							
c. have not been made; however, the time limit for making such amended	c. have not been made; however, the time limit for making such amendments has NOT expired.						
d. Light have not been made and will not be made.	d. Lu have not been made and will not be made.						
8. An English language translation of the amendments to the claims under PCT Ar	An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).						
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).	An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).						
10. An English language translation of the annexes of the International Preliminary E Article 36 (35 U.S.C. 371(c)(5)).	An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).						
Items 11 to 20 below concern document(s) or information included:							
11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.							
	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.						
13. X A preliminary amendment.	A preliminary amendment.						
14. An Application Data Sheet under 37 CFR 1.76.	An Application Data Sheet under 37 CFR 1.76.						
15. A substitute specification.	A substitute specification.						
16. A power of attorney and/or change of address letter.	A power of attorney and/or change of address letter.						
17. A computer-readable form of the sequence listing in accordance with PCT Rule 1	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.						
18. A second copy of the published International Application under 35 U.S.C. 154(d)	A second copy of the published International Application under 35 U.S.C. 154(d)(4).						
	A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).						
20. X Other items or information: Return Postcard	Other items or information: Return Postcard						

This collection of Information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND T: Mail Stop PCT, Commissioner for Patents, P. . Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION N	O. (if known, see 37 CFR 1.5 151616	nown, see 37 CFR 1,5) INTERNATIONAL APPLICATION NO. PCT/US03/11802		ATTORNEY'S DOCKET NUMBER 56029-51044		
21. X The following	fees are submitted:			CALCULATIONS	PTO USE ONLY	
BASIC NATIONAL FEE (CFR 1.492(a)(1)–(5)):						
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO\$1110.00						
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO\$950.00						
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO						
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)						
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)			\$ 750			
Surcharge of \$130.00 for furnishing the eath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).			\$ 130			
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$		
Total claims	40 - 20 =	20	X \$18.00	\$ 360	T	
Independent claims	11 -3=	8	X \$88.00	\$ 704		
MULTIPLE DEPENDE	NT CLAIM(S) (if applicable)		+ \$300.00	\$		
		TOTAL OF ABOVE CA		\$ 1,944		
Applicant claims : by 1/2.	Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.			\$ 972		
SUBTOTAL =			\$ 972	ļ		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).		s				
TOTAL NATIONAL FEE =		\$ 972				
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +		\$				
TOTAL FEES ENCLOSED =		\$ 972				
		Amount to be refunded:	\$			
			Amount to be charged:	\$		
a. A check in th	ne amount of \$	to cover the abo	ove fees is enclosed.			
b. X Please charge my Deposit Account No. 20-0823 in the amount of \$ 972 to cover the above fees. A duplicate copy of this sheet is enclosed.						
c. X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 20-082.3 duplicate copy of this sheet is enclosed.						
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.						
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.						
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SEND ALL CORRESP			1)- 1) [] [] - [- [- [- [- [- [- [- [
Daniel S. Kasten Thompson Coburn, LLP SIGNATURE			() - / · Con_			
One US Bank Plaza Daniel			S. Kasten			
St. Louis, MO 63101 NAME						
			Reg. No.			

PATENT COOPERATION TREATY IN THE UNITED STATES RECEIVING OFFICE

CERTIFICATE OF EXPRESS MAILING UNDER 37 C.F.R. § 1.10

I hereby certify that this correspondence and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this \(\frac{12 \text{PL}}{\text{LL}} \) day of October, 2004 in an envelope as "Express Mail Post Office To Addressee" Mailing Label Number \(\frac{EV482531525US}{2} \) addressed to: Commissioner for Patents, MAIL STOP PCT, P.O. Box 1450, Alexandria, VA 22313-1450 -- Attn: DO/EO/US.

Daniel S. Kasten
Print or Type Name

Signature

In re international application of Washington University

International Application No. PCT/US03/11802

Authorized Officer

International Filing Date: 15 April 2003

For: Regulated Attenuation of Live Vaccines to Enhance

Cross-Protective Immunogenicity

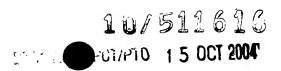
Commissioner for Patents MAIL STOP PCT P.O. Box 1450 Alexandria, VA 22313-1450

Attn: DO/EO/US

TRANSMITTAL

Enclosed herewith please find:

- 1. Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. 371;
- 2. Preliminary Amendment A;
- Replacement claims pages 75-78;
- 4. Copy of Response to Written Opinion filed in international application No. PCT/US03/11802; and
- 5. Duplicate copy of this letter.



Please be hereby authorized to charge our deposit account 20-0823 for the required fees and file said national phase application.

Respectfully submitted,

Daniel S. Kasten Reg. No. 45,363

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